

What is claimed is:

1. A purified ERAB polypeptide.
- 5 2. The polypeptide of claim 1, wherein the polypeptide comprises the amino acid sequence shown in Figure 1D (Seq. Id. No. 2) or a variant thereof.
3. The polypeptide of claim 2, wherein the polypeptide comprises a portion of the amino acid sequence shown in Figure 1D (Seq. Id. No. 2) or a portion of a variant thereof.
- 10 4. The polypeptide of claim 1, wherein the polypeptide is human or murine.
5. The polypeptide of claim 1, wherein the polypeptide comprises a molecular weight of about 27,000 to 29,000 daltons.
- 15 6. An isolated nucleic acid which encodes an ERAB polypeptide.
7. The nucleic acid of claim 6, wherein the ERAB polypeptide comprises human ERAB polypeptide.
- 20 8. The nucleic acid of claim 6, wherein the nucleic acid comprises the nucleic acid sequence shown in Figure 1D (Seq. Id. No. 1) from nucleotide 19 to nucleotide 801 or a variant thereof.
9. The nucleic acid of claim 6, wherein the nucleic acid is DNA, RNA, or a recombinant nucleic acid.
- 25 10. A replicable vector comprising the nucleic acid of claim 6.
11. The replicable vector of claim 10, wherein the vector is a prokaryotic expression vector, a yeast expression vector, a baculovirus expression vector, a mammalian expression vector, an episomal mammalian expression vector, pKK233-2, pEUK-C1, pREP4, pBlueBacHis A, pYES2, pSE280, or pEBVHis.
- 30

12. A host cell comprising the vector of claim 10.
13. The host cell of claim 12, wherein the host cell is a eukaryotic cell, a somatic cell, a germ cell, a neuronal cell, a myocyte, a prokaryotic cell, a virus packaging cell, or a stem cell.
14. The nucleic acid of claim 6, wherein the nucleic acid comprises antisense oriented nucleic acid.
15. A cell comprising a foreign nucleic acid, which nucleic acid comprises at least a portion of the nucleic acid sequence shown in Figure 1D from nucleotide 19 to a nucleotide 801 or a variant thereof.
16. An antibody to the polypeptide of claim 1.
17. The antibody of claim 16, wherein the antibody is a polyclonal antibody, a fragment of an antibody, or a monoclonal antibody.
18. A transgenic non-human mammal whose germ and somatic cells contain and express a nucleic acid molecule encoding human ERAB polypeptide or a biologically active variant thereof, the nucleic acid molecule having been stably introduced into the non-human mammal at the single cell stage or an embryonic stage, and wherein the nucleic acid molecule is linked to a promoter and integrated into the genome of the non-human mammal.
19. The transgenic non-human mammal of claim 18, wherein the animal is selected from the group consisting of a mouse, a rat, a swine, a fowl, a dog, or a nonhuman primate.
20. A method for evaluating the ability of an agent to inhibit binding of ERAB polypeptide to amyloid-beta peptide which comprises:

Ent. 27/ 30

- 5
- (a) incubating ERAB polypeptide, the agent and amyloid-beta peptide under suitable binding conditions;
- 10
- (b) determining the amount of amyloid-beta peptide bound to ERAB polypeptide from the incubate of (a); and
- 15
- (c) comparing the amount of bound amyloid-beta peptide determined in step (b) with an amount of amyloid-beta peptide bound to ERAB polypeptide determined in the absence of the agent, thereby evaluating the ability of the agent to inhibit binding of ERAB polypeptide to amyloid-beta peptide.
21. The method of claim 21, wherein the agent comprises a peptide, a peptidomimetic compound, a nucleic acid, or a small molecule.
- 20
22. A pharmaceutical composition which comprises an agent capable of inhibiting an interaction between an amyloid-beta peptide and an ERAB polypeptide and a pharmaceutically acceptable carrier.
- 25
23. The pharmaceutical composition of claim 23, wherein the carrier is a diluent, an aerosol, a topical carrier, an aqueous solution, a nonaqueous solution or a solid carrier.
- 30
24. A method for treating a neurodegenerative condition in a subject which comprises administering to the subject an agent, capable of inhibiting binding of an ERAB polypeptide to an amyloid-beta peptide, in an amount effective to inhibit such binding and thereby treat the neurodegenerative condition in the subject.
- 35
25. The method of claim 25, wherein the neurodegenerative condition comprises Alzheimer's disease, Down's syndrome, Parkinson's disease, Huntington's disease,

-55-

schizophrenia, a demyelinating disease or multiple
sclerosis.

ad 13